2

AD-A253 150

NAVAL WAR COLLEGE Newport, R.I.



INCREASING AIR FORCE RESCUE CAPABILITIES WITHOUT MORE MONEY

by

Robert A. Stenevik Lieutenant Colonel USAFR

A paper submitted to the Faculty of the Naval War College in partial satisfaction of the requirements of the Department of Operations.

The contents of this paper reflect my own personal views and are not necessarily endorsed by the Naval War College or the Department of the Navy.

Signature:

22 June 1992

Paper directed by Captain H. Ward Clark Chairman, Department of Military Operations

Approved by:

92 7 27 087



SECURITY CO	ADS + CAPECH C	SE THE PAGE							
			REPORT DOCU	MENTATION	PAGE				
18 REPORT SECURITY CLASSIFICATION Unclassified				16 RESTRICTIVE	MARKINGS		1		
28 SECURITY CLASSIFICATION AUTHORITY				DISTRIBUTION AVAILABILITY OF REPORT DISTRIBUTION STATEMENT A: Approved for					
26 DECLASSIFICATION DOWNGRADING SCHEDULE				Public Release; distribution is unlimited.					
4 PERFORMING ORGANIZATION REPORT NUMBER(S)				5 MONITORING ORGANIZATION REPORT NUMBERGY					
60. NAME OF PERFORMING ORGANIZATION OPERATIONS DEPARTMENT			66 OFFICE SYMBOL (# applicable)	7a. NAME OF MONITORING ORGANIZATION					
6c ADDRESS (Gry. State, and ZIP Code) NAVAL WAR COLLEGE NEMPORT, R.I. 02841				76. ADDRESS (City, State, and ZP Code)					
Be. NAME OF FUNDING/SPONSORING ORGANIZATION			86. OFFICE SYMBOL (If applicable)	9. PROCUREMENT INSTRUMENT IDENTIFICATION NUMBER					
BC. ADDRESS	(City, State, and	d ZIP Code)		10. SOURCE OF	FUNDING NUMBER	ts .			
				PROGRAM ELEMENT NO.	PROJECT NO.	TASK NO.	WORK UNIT ACCESSION NO.		
11. TITLE (Include Security Classification)									
Increa	sing Air	Force Rescue	Capabilities W	ithout More	Money (U)				
12. PERSONA	L AUTHORES)	TC Pobert λ	Stenevik, USAF	מי	 				
13a. TYPE OF		13b. TIME CO		14. DATE OF REPO	XT (Year, Month.	Doy) 15 P/	NGE COUNT		
FIN	IL	FROM							
satisfac paper re	etion of the fleet my	TION A paper s the requirement own personal	ubmitted to the ts of the Depar views and are n	Faculty of bment of Ope of necessary	the Naval We erations. The ly endorsed	er Colleg e conten by the N	e in partial ts of this aval War		
17.	COSATI	CODES	18 SUBJECT TERMS (Continue on rever	se il necessary and	dentity by	BIOCE NUMBER		
PELD	GROUP	SUB-GROUP	CSAR; AFSOC;		rce Structu	re; Forc	e Mix;		
·			Threat; Tact	ics					
Theater commanders in the Pacific, the Atlantic, and in Europe have expressed concern about the inability of the Air Force to meet their peacetime and wartime rescue requirements. The current budget climate will not allow solutions based on programming. This paper suggests alternatives based upon the operational commander's requirements, (instead of daily concerns within the supporting command) which should increase the Air Force's capability to support the operational commanders. The scope of the paper is limited to which major command should do the rescue mission, what structure within the command should administer the mission, and how to insure tanker support for contingency operations.									
₩ UNCLAS	SIFIEDAUNLIMIT	IUTY OF ABSTRACT FED SAME AS R	PT. DTIC USERS	21. ABSTRACT SECURITY CLASSFICATION Unclassified					
220. NAME OF RESPONSIBLE INDIVIDUAL CHAIRMAN, OPERATIONS DEPARTMENT				226 TELEPHONE (841-341	Anclude Area Code) 22c. OFFIC C	E SYMBOL		
		43.40		11. 4					

DD FORM 1473, 84 MAR

83 APR edition may be used until exhausted All other editions are obsolete

SECURITY CLASSIFICATION OF THIS PAGE

Abstract of INCREASING AIR FORCE RESCUE CAPABILITIES WITHOUT MORE MONEY

Theater commanders in the Pacific, the Atlantic, and in Europe have expressed concern about the inability of the Air Force to meet their peacetime and wartime rescue requirements. The current budget climate will not allow solutions based on programming. This paper suggests alternatives based upon the operational commanders' requirements, (instead of daily concerns within the supporting command) which should increase the Air Force's capability to support the operational commanders. The scope of the paper is limited to which major command should do the rescue mission, what structure within the command should administer the mission, and how to insure tanker support for contingency operations. The findings are: the rescue mission should be transferred to the Air Combat Command. The current Air Rescue Service is an effective apparatus to administer the mission, and should be integrated into the Air Combat Command. solution to the tanker problem is to put more tankers in the active force, but this is not a cost free solution. Specific and purposeful planning to use reserve component assets early, is the alternative. These steps offer the most potential for supporting the theater rescue requirements. The ability to conduct long range rescue in a med.im threat with the aircraft configurations of today, is limited. The Tactics Process Improvement Team in progress at the Air Rescue Service, should specifically search for tactics to improve this ability.

TABLE OF CONTENTS

CHAPTER		PAGE
ABSTRAC	T	ii
I	INTRODUCTION	1
II	AIR FORCE MAJOR COMMANDS - WHICH ONE SHOULD DO RESCUE?	4 5 7 8
III	SHOULD RESCUE BE ANOTHER STAFF FUNCTION OR MAINTAIN SERVICE STATUS	10
IV	FORCE STRUCTURE - FORCE MIX	12
v	THE THREAT - THE TACTICS	16
VI	CONCLUSION	17
NOTES		19
BIBLIOG	RAPHY	21

•	4
Aceseston Por	
Grant Description	
Distribution/	
Availability Codes	
Dist Special	

CHAPTER I

INTRODUCTION

According to Air Force Chief of Staff General Merrill

A. McPeak "...the Air Force will drop from about 42 fighter wing equivalents at our 1980s peak to 26.5 wing equivalents. Our part of the Base Force is adequate for a Desert Storm-like contingency with a little something to spare if another problem were to pop up in sequence."

There are two implications for Combat Search and Rescue (CSAR) in General McPeak's statement: the CSAR requirement for the future, if in proportion to the fighter force, is a smaller requirement than planned for up to now; and if money was unavailable for improving CSAR capabilities in the past, it is definitely going to be unavailable in the future.

The first implication that the future CSAR requirement is smaller than the past, is not a relief for rescue planners. In fact, it complicates things in this way: rescue assets in the Air Force are very close to what planners established for wartime needs. These assets are largely in the reserve component, especially the tanker aircraft. This heavy concentration of assets in the reserve makes it difficult to support peacetime requirements overseas. With a reduction in the wartime requirements, it is possible the rescue forces will shrink, which will amplify the existing shortages overseas.

The second implication, status quo funding, has

ramifications in terms of quality and quantity. The quality issue is upgrading aircraft to survive operations in the medium threat environment. The quantity issue goes back to the peacetime tanker shortage. Without some kind of change, the rescue aircraft may only be capable of peacetime missions, and because they are so heavily concentrated in the reserve component, the peacetime utility may be equally as limited as the combat capability. A compound problem.

The thesis of this paper follows from the view above. The Air Force is going to conduct CSAR in an environment up to medium threat and is going to do so without more money for upgrading equipment, and possibly with a smaller force. There is an opportunity today, however, to increase CSAR capabilities, by making decisions based on providing the best support to the operational commanders, instead of improving the less than ideal conditions that may exist for the supporting commanders as a result of the budget picture. Today's opportunity is the re-structuring of the Air Force and the rethinking about missions and methods.

Indeed, the research for this paper was designed to discover what kind of thinking about the rescue mission was going on in the Air Force during this re-structuring. As expected, there were thoughts about the relationship of combat rescue to special operations. There were thoughts about force structure and force mix. Most of all, there were thoughts about how to do the mission better. The scope of the research was limited because of the current nature of the topic, and the

inability of sources to go on record until staffing could be completed. The only assumptions by the writer are that the reader will appreciate the options as additional ideas, and understand there is no pretension about the political, and institutional difficulties of implementing the actions. The focus is on the theaters and what can be done to increase the rescue capabilities for the operational commanders.

The discussion will start with which Major Command (MAJCOM) should do rescue - Air Force Special Operations Command (AFSOC) or Air Combat Command (ACC)? The next decision is, should rescue become an integrated staff function or maintain service status? What about unit level structures; is there a better force mix, or is there a better way for using the mix as it is? A call for new tactics to defeat the threat and final recommendations are in the conclusions.

CHAPTER II

AIR FORCE MAJOR COMMANDS - WHICH ONE SHOULD DO RESCUE?

The way things are today, rescue is the responsibility of the Air Rescue Service (ARS) under the Military Airlift Command (MAC). Because of the re-structuring within the Air Force, MAC is undergoing a name and mission change to the Air Mobility Command (AMC). This has generated an evaluation of what missions MAC did, and what missions AMC should do. When considering what missions AMC should do, the analysis leads directly to what missions the other Major Commands (MAJCOMS) should do. Besides the AMC, there are two other MAJCOMS where the rescue mission seems to fit: the new Air Combat Command (ACC), and the Air Force Special Operations Command (AFSOC). The question then is between the three:

During the research, no other question seemed so widely discussed. More precisely, no other subject was as thoroughly staffed as whether the Air Force Special Operations Command (AFSOC) should do combat rescue? The reason for this is the similarity of equipment and tactics used in both missions. The roots of the argument easily go back to at least March, 1983, and the establishment of 23 Air Force. Written analysis on the ACC and AMC options was unavailable. Most staffers at MAC, AFSOC, and Air Staff agreed that AMC was an unlikely home for rescue for reasons which, to them, were intuitively obvious. The most obvious of which is Combat Rescue is a

combat mission. This simplistic view of the obvious overlooks the reality that CSAR is a mission with a capability problem. It is very easy to believe neither AFSOC nor ACC want a mission with a problem, and may fight initiatives to give them the mission, at least until it gets fixed. For this paper, the arguments for leaving the mission in the new AMC will not be offered, because it is a political argument, and not one of mission match. The decision then returns to the first question. Should AFSOC be responsible for CSAR?

If yes, it is the MAJCOM for the mission. If no, then CSAR belongs in the Air Combat Command.

Why CSAR belongs in AFSOC. When shoulder launched surface to air missiles matured to the point where they were assumed present on nearly every battlefield, the nature of search and rescue changed. The concept of operations became one with these characteristics:

-Long range, clandestine penetration of hostile airspace
--Precise navigation to avoid threats

---operate at night and/or in adverse weather
---low level, terrain masking techniques
--requires thorough mission planning
---will not launch quick response/off alert
-Requires first pass insertion/extraction
--air search for objective not possible
--search/reception by surface teams possible²

These are the same operational concepts for special operations and this similarity was the basis for combining special operations and combat rescue forces in 1983. Major General Robert B. Patterson, the Commander of 23 Air Force, explained the advantages of the concept to the House of Representatives (Procurement and Military Nuclear Systems

subcommittee-Committee on Armed Services) on March 13, 1986:

23 Air Force was established in March, 1983 to act as the focal point within MAC and the Air Force for integration of mutually supportive special operations and combat rescue forces. This integration was then, and is now, a pragmatic, fiscally responsible means to lessen the Air Force Special Operations forces short fall. Initially integration under 23 Air Force was designed to increase Air Force special operations capability to the maximum degree until planned aircraft acquisition programs could put "more rubber on the ramp".3

The reason General Patterson combined the forces was to increase the capabilities in special operations. It worked. When the Air Force Special Operations Command stood up and the rescue assets became special operations assets, the program was in pretty good shape. The impact on the rescue forces was just the opposite and put them back in a similar condition to the one special operations were in before the consolidation in 1983.

The major argument today for putting CSAR in AFSOC is the same argument for combining the missions in 1983: "...to capitalize on the similarity of required tactics and equipment for special operations and combat rescue mission taskings." An interesting spin to put on this argument is brought on by putting in perspective two things. First, AFSOC has rightfully recognized they have the only CSAR capability until ARS meets the threat. The premise of this paper, however, is ARS is not going to meet the threat as planned (with money). Therefore, if AFSOC is going to do CSAR until ARS programming gives them the capability, and in reality they are never going to get the

capability, then why not formally give AFSOC the mission? This would at least give programming solutions a better chance in major force program 11.

Why CSAR belongs in ACC (or, Why CSAR should not be given to AFSOC). The main argument against putting CSAR in special operations, is ironically, the same reason special operations were combined with CSAR in 1983: to provide and maintain maximum special operations capability. This argument maintains the rescue mission will divert special operations capability, during peacetime, as well as wartime. The specific position of the United States Special Operation Command (USSOCOM) was outlined in December, 1988:

...2. Combat Search and Rescue (CSAR) is not a mission which Special Operations Forces (SOF) are trained, organized, and equipped. SOF force structure and resourcing are based on special operations base case wartime requirements. Significant resource short falls, particularly in air assets, currently exist, and any use of SOF for CSAR would be at the expense of special operations.

3. Therefore, theater SAR/CSAR requirements dictate the establishment of a standing rescue force, separate from SOF. ...

The requirement for a separate rescue force outside of SOF was also recommended for peacetime requirements by General McPeak when he was Commander in Chief of the Pacific Air Forces. His letter to the CSAF and the meeting of the CINCs (Corona 87/89) led to the activation of the Air Rescue Service (ARS) in 1989. The ARS has done a good job of planning a revitalized rescue force, but it has not been successful in getting the

money required to fulfill its plans. The result is the rescue forces are not capable of doing their wartime mission (medium threat). AFSOC and USSOCOM recognize this and recognize they will have to do the CSAR mission until ARS assets get upgraded as discussed earlier. This support, if it interferes with the special operations mission, will be resolved by the Operational Commander (CINC). 8

Another consideration in the argument to put CSAR in the Air Combat Command, is to put the assets under the ultimate user. This has the advantage of giving the theater Air Commander operational control of the forces and avoids competition with the special operations requirements.

Additionally, when it comes to support in any context, it is more likely to get it from the user than from a disinterested provider. Testimony to this is given in the AFSOC white paper "Combat Rescue - Bridging the Gap."

The Best Choice. The decision on which MAJCOM should do rescue needs to consider the ultimate impact on the operational abilities of the theater CINC. The arguments, although only briefly covered, make some points which can be combined into one view on the operations level. Special operations and Combat Search And Rescue are both important missions to the operational commander. The argument which says putting them in the same command will dilute special operations is incomplete; consolidation will dilute both missions. The most effective structure is to give the Special Operations commander his force for his mission, and the Air Commander his rescue force and its

mission. The apparatus for interfacing and helping each other exist in the concept of the Joint Rescue Coordination Centers. 10 Putting CSAR in the ACC also keeps the proper focus on programming issues. This means the CINCs can see a short fall in rescue capability as a short fall in rescue capability - not some fuzzy possibility of a short fall in special operations capability if the rescue tempo exceeds certain threshold levels. Furthermore, the distinction needs to remain clear as Base Force cuts come about, so when cuts are made it will be clear what is being cut. And last but not least, this gives the Air Component Commander operational control of the forces for the significant and important peace time rescue requirement.

CHAPTER III

SHOULD RESCUE BE ANOTHER STAFF FUNCTION OR MAINTAIN SERVICE STATUS?

The possibilities of integrating rescue into a MAJCOM staff is one the things people are thinking about, but not addressing directly. This is because it has not been announced who is going to get the mission. In a similar manner, this paper will very briefly testify to the advantages of the current structure and not argue directly for the staff function option.

In his message of 21 March, 1989, CINCMAC outlined his plan to develop an organizational structure dedicated to rescue and capable of supporting an increased force structure. The Air Rescue Service (ARS) was the second step in his plan. The ARS, in simplified terms, would complete his plan by establishing a rescue organization in the Pacific and European theaters for theater planning and exercising command responsibilities in their respective theaters. The bottom line to the timing was connected to growth in rescue force structure, especially tankers in the active force.

ARS was successful in developing plans for force structure growth though programming, and fixing force mix problems thru re-structuring. Political and institutional realities on the other hand, have undermined the programming and re-structuring which were the heart of the envisioned, revitalized rescue force. These realities are a source of frustration for the operational commanders and the frustration may be their overriding motivation to opt for a different infrastructure.

This would be a mistake because the frustrations are a result of force structure, not infrastructure.

Since its activation, ARS has made significant advances in formalizing a CSAR structure to serve the CINCs world wide, despite the difficulties in force structure. They have developed multi-service procedures for Combat Search and Rescue² and other procedures for organizational structure and standardization. They have brought together (within the headquarters) a pool of rescue experts who are available to fill Rescue Coordination Center (RCC) and Joint Rescue Coordination Center (JRCC) billets during contingencies, without tapping the aircrew pools. This is a significant concept which provides the operational commanders 15% to 20% more capability. MAC has appointed ARS (at their request), as the lead in a joint service Process Improvement Team (PIT) with the charter to: (1) examine tactics to recover downed crew members in future contingencies, (2) develop new tactics for increased threat, (3) examine and offer fixes as necessary in the training programs to reflect the future battlefield, (4) validate doctrine, (5) evaluate quidance for joint CSAR. The first PIT was held at ARS headquarters from 28 - 30 January, 1992.4

When the announcement is made about which MAJCOM will do CSAR, the new MAJCOM commander should integrate the ARS apparatus virtually as it exists today. Name changes and modest realignments may be necessary, but the best way to support the operational commanders is to keep the system that has been maturing since 1989.

CHAPTER IV

FORCE STRUCTURE - FORCE MIX

There are a lot of proposals about how to bed down the Air Force rescue assets. Most of the proposals are unfortunately, limited by parameters designed to preserve the programmed force structure and institutional claims, instead of theater requirements. Specifically, the force structure is planned around Base Case requirements established in 1987 and 1989. The tanker bed downs are limited by the force mix and the politics of changing reserve component missions.

Two remarks in the introduction bare repeating at this point. First, the political and institutional pressures are real world and do play their part in planning. Secondly, the dynamics of planning today are magnified by the unknowns in Air Force re-structuring and force down sizing. The force structures as follows was received by telephone from ARS/XP³ on 27 April, 1992. The ARS/XP position reflects the political and institutional influences of the past.

The programmed force structure are ARS (FY 95) is 29 HC-130s (7 in an active duty unit and 22 in the reserve component) and 71 HH-60s (36 in active duty units and 35 in the reserve component). The active duty 130s are all going to be located at Patrick AFB in Florida and the reserve component 130s will be split up between five different units. The HH-60s will be bedded down with 15 in PACAF, 5 in LANTCOM, and the remaining 51 in the CONUS at eight locations. This force structure

very closely meets the wartime requirements established by the MAC rescue study in 1989, but, it does require activation of the reserve component.

This force structure also meets the peacetime requirements,⁴ although the tanker force mix is very problematic - especially overseas.

The questions to be answered, however, is how well does the force support the theater CINCs in contingency operations? Contingencies are what should be the planning basis for today. General McPeak's idea is his Base Force will fight a little more than one major regional conflict. For purposes of this paper, a little more than one is one and one half, or one major and one minor. This means two operational commanders need simultaneous support, and probably with short notice, and perhaps for some extended time (Desert Storm is not over yet vis-a-vis the rescue requirement). The way units are structured today will not support two theater commanders simultaneously and quickly, without early activation of reserve component forces; or without their participation on a volunteer basis. The obvious reason is the tanker force mix.

Here are two ways to make sure the system will quickly support two contingencies. One way is to put more tanks in the active force; and the other way, is to ask for reserve augmentation quickly. Putting more tankers on active duty might seem to be an inappropriate option because this paper is about increasing capability without increasing cost. It does cost a little extra to run an active duty unit compared to a reserve

unit, true. However, if you compare the total rescue forces to the rescue requirement to support one and a half - or even two major regional contingencies, there is beyond a doubt excess capability which can be cut out. There is an opportunity to save much more than the difference between running an active and a reserve rescue organization. It is also true, cutting reserve forces is a very political thing. However, the concept does not have to mean shutting down a reserve unit, if you can convert it to another mission as the active force draws down. In any case, putting four to six more tankers on active duty (recommend in the Pacific) will provide the operational commanders with sufficient capability to react quickly in two regional conflicts. The added flexibility and capability during peacetime may be sufficient to convince the MAJCOM to pay the extra cost, especially if the operational commanders demand it.

Option Two: there are two ways to quickly access the reserve component. The formal process is through Title 10, Section 673b: "...when the President determines that it is necessary to augment the active forces for an operational mission, he may authorize the Secretary of Defense ...without the consent of the members concerned, to order any unit, ...to active duty ... for not more than 90 days." It might be possible to have this authorization approved ahead of time to speed up the process, otherwise it is likely to take weeks.

The informal way to quickly access the reserve component is the quickest and cheapest. Just ask for their service. History has shown 5 Air Force Reserve flying units can, and

willingly do, support real world emergencies overnight when asked. If the reserve component remains at its current strength, it is probable that a 4/4 composite squadron equivalent would be available on a volunteer basis for at least as long as the Title 10 action is likely to take.

CHAPTER V

THE THREAT - THE TACTICS

Whether you chose the Air Force Special Operations Command or the Air Combat Command; whether you chose to keep a rescue service or integrate it as another staff function; whether you put more tankers on active duty or use the reserves early on; no matter what you do, if you do not spend more money, you are going to have a hard time doing long range combat rescue in a medium threat with HC-130s and HH-60s configured the way they are today. Something needs to change.

The only thing that will allow the current aircraft to operate safely in a medium threat, without counter measures, is a tactic designed to do it. The Tactics Process Improvement Team hosted by ARS needs to address this requirement directly. The minutes of their first meeting are encouraging from the view of the expertise and motivation of the group. However, it appears the majority of counter threat solutions require programming and equipment. There needs to be another option.

CHAPTER VI

CONCLUSION

Increasing capabilities without spending more money is not an exciting task; fixing what you have and trying to do better just doesn't compare with designing a new weapon system with all kinds of bells and buzzers. It is not as much fun, but it needs to be done. The most important step is defining where the increased capability is required, or where is the improvement needed. In Combat Search and Rescue, the increased capability is required where it will support two operational commanders, fighting regional contingencies at the same time, anywhere in the world. Additionally, supporting the operational commanders who have peacetime rescue requirements must be up front in the formula. The considerations which make day to day training and administration of the forces more efficient, and routine, need to be secondary to supporting the CINCs. Said another way, the first step on the way to supporting the CINCs, is to remember it is the theater commanders' requirements, not the supporting commanders' requirements, which must receive the priority.

The second step on the way to improving support for the CINCs, is incorporating Air Rescue Service into the Air Combat Command. This will keep the momentum going in those improvements started since 1989. It will avoid degrading the theater special operations capabilities. It will keep command and control in the proper component during peacetime and wartime. It will keep budgeting issues clear. It will provide

a source for wartime augmentees in the RCCs and JRCCs. Above all, putting the combat rescue mission in the combat command puts the responsibility for the mission with the user.

The third step on the way to improving support for the CINCs, is to put additional tankers in active duty units. The fall back position is to make plans on using the reserve component early. The temptation to go it alone until the last minute is understandable - but it will be a mistake.

The fourth step on the way to improving support for the CINCs, it to develop tactics which will allow the aircraft as they are configured today, to operate in a medium threat as safely as possible. The ARS Tactics PIT has the expertise and motivation for the task. Expectations should reflect the difficulties of this task, and the likelihood of a significant number of CSAR missions going to the special operation forces.

The final step on the way to improving support for the CINCs is to go back to step number one and remember it is the theater commanders' requirements, not the supporting commanders' requirements, which must receive the priority.

NOTES

Chapter I.

1. "Chief Seeks New Description," Policy Letter From the Secretary of the Air Force, April 1992, p. 1.

Chapter II

- 1. Major General Robert B. Patterson, "Statement", U.S. Congress, House, Committee on Armed Services, <u>Procurement and Military Nuclear Systems</u>, Hearings (Washington, D.C.: U.S. Govt. Print. Off., 1986), p. 1.
- 2. 23 Air Force Briefing Slide, "Air Force Combat Rescue Combat Concept of Operations," Scott AFB, IL: Circa 1986.
 - 3. Patterson, p. 2.
 - 4. Ibid.
- 5. Message from USCINSOC/SOCS to Other CINCs and Major Commands, "USSOCOM Position on Combat Search and Rescue (CSAR)," 231610Z, December 1988.
- 6. Trelawny J. Bruce, "Short History of United States Air Force Pararescue 1942 to 1989," Unpublished Research Paper, Military Airlift Command, Scott AFB, IL: 1989, p. 17.
- 7. USAF/XOOTA, Point Paper, "CSAR Status Brief," Pentagon, Washingto, D.C., August 1991, p. 1.
- 8. USSOCOM, Position Statement, "Theater Search and Rescue (SAR) As It Relates to Special Operations," McDill AFB, FL., Circa 1989.
- 9. Air Force Special Operations Command, White Paper, "Combat Rescue Bridging the Gap," Hurlburt Field, FL, August, 1991.
- 10. TAC-TRADOC Air Land Forces Application (ALFA) Agency, Multi-Service Procedures for Combat Search and Rescue, (Fort Monroe, VA: May 1991), p. viii.

Chapter III

- 1. Message from CINCMAC/CC to Other CINCs, MAJCOMs and Rescue Units, "Separate Air Rescue Service," 211540Z, March 1989.
 - 2. ALFA Agency, p. 1.

- 3. Message from HQMAC/XO to Rescue and Special Operations Units and Headquarters, "Combat Rescue (CR) Process Improvement Team (PIT)," 091430Z, December 1991.
- 4. Air Rescue Service, After Action Report, "CSAR Tactics Workshop," McClellan AFB, CA: January 1992, p.1.

Chapter IV

- 1. Air Rescue Service Briefing Slide, "Combat Rescue Requirements TAF SAR Road Map," McClellan AFB, CA: 28 January 1992.
- 2. USAF/xooa Briefing Slide, "Force Structure Shortfalls," from CSAR/Special Operations briefing of USAF/XO position, Pentagon, Washing, D.C.: Circa 3arly 1992.
- 3. Telephone conversation with LTC Pletcher, ARS/XP, McClellan AFB, CA, 27 April 1992.
 - 4. Same as Note 1
- 5. Office of Air Force Reserve (AF/REL), <u>Air Force</u> Reserve Road Map to the Future, (Pentagon, Washington, D.C.: 1991), p. 27.

Chapter V

1. LTC Victor E. Renuart, Jr. and LTC Bryan D. Brown, "Combat Search and Rescue: The Search for Tomorrow," Unpublished Research Paper, U.S. Army War College, Carlisle Barracks, Pennsylvania: 1992, p. 18.

BIBLIOGRAPHY

- AFSOC/CV Message. "Harmonization of Rescue Revitalization and 23 AF Non-SOF Divestiture Plans." 041632Z, April 1989.
- Air Force Special Operations Command. White Paper. "Combat Rescue Bridging the Gap." Hurlburt Field, FL. August 1991.
- Air Rescue Service. After Action Report. "CSAR Tactics Workshop." McClellan AFB, CA: January 1992.
- Air Rescue Service Briefing Slide. "Combat Rescue Requirements TAF SAR Road Map." McClellan AFB, CA: 28 January 1992.
- Bone, John R. "Combat Search and Rescue Military Stepchild."
 Unpublished Research Paper. U.S. Air War College,
 Maxwell AFB, AL: 1988.
- Bruce, Trelawny J. "Short History of United States Air Force Pararescue - 1942 to 1989." Unpublished Research Paper. Military Airlift Command, Scott AFB, IL: 1989.
- "Chief Seeks New Description." Policy Letter From the Secretary of the Air Force, April 1992, pp. 1-4.
- CINCMAC/CC Message. "Separate Air Rescue Service." 211549Z, March 1989.
- HQMAC/XO Message. "Combat Rescue (CR) Process Improvement Team (PIT)." 091430Z, December 1991.
- Mullarky, J. W. and Taylor, S. W. "Combat Search and Rescue The CINCs Dilemma." Unpublished Research Paper. U.S. Air War College, Maxwell AFB, AL: 1990.
- Office of the Air Force Reserve. Air Force Reserve Road Map to the Future. Pentagon, Washington, D.C.: 1991.
- Renuart, Victor E. and Brown, Bryan D. "Combat Search and Rescue: The Search for Tomorrow." Unpublished Research Paper. U.S. Army War College, Carlisle Barracks, Pennsylvania: 1992.
- TAC-TRADOC Air Land Forces Application (ALFA) Agency. Multi-Service Procedures for Combat Search and Rescue. Fort Monroe, VA: 1991.
- Telephone Conversation with LTC Pletcher, ARS/XP, McClellan AFB, CA. 27 April 1992.
- 23 Air Force Briefing Slide. "Air Force Combat Rescue Combat Concept of Operations." Scott AFB, IL: Circa 1986.

- USAF/X00A Briefing Slide. "Force Structure Shortfalls." From CSAR/Special Operations Briefing of USAF/X0 Position. Pentagon, Washington, D.C.: Circa early 1992.
- USAF/XOOTA. Point Paper. "CSAR Status Brief." Pentagon, Washington, D.C.: August 1991.
- USCINSOC/SOCS Message. "USSOCOM Position on Combat Search and Rescue (CSAR)." 231610Z. December 1988.
- U.S. Congress. House. Committee on Armed Forces. <u>Procurement and Military Nuclear Systems</u>. Hearings. Washington: U.S. Govt. Print. Off., 1986.
- U.S. Laws, Statues, etc. <u>U.S. Code, Title 10 Armed Forces</u>. 1989 ed. Washington: U.S. Govt. Print. Off., 1989.
- USSOCOM. Position Statement. "Theater Search and Rescue (SAR) As It Relates to Special Operations." McDill AFB, FL: Circa 1989.